





Fig. 8 The system control unit provides instructions to transfer data to the syndrome calculator and the error detector. The DMA control unit makes a request of the bus control unit for data transfer. The bus control unit starts data transfer from the buffer memory to the syndrome calculator and the error detector. The syndrome calculator The error detector executes syndrome calculation. detects error. NO Syndrome NO calculation for the final error-containing code code word complete detected YES  $\mathbf{YES}$ The error corrector calculates the position and value c-5 of the Error, and makes a request of the bus control unit for readout of error-containing data. The data are transferred from the buffer memory to the error corrector. After correcting the error, the error corrector makes a request of the bus control unit for writing of the data. The bus control units writes the error-corrected data of the error corrector in the buffer memory. NO The final code word processed? The system control unit provides the error detector with instructions to transfer data of one sector. c-10 The DMA control unit makes a request of the bus control unit for transfer of data of one sector. c-11 The bus control unit starts to transfer data of one sector from the buffer memory to the error detector. The error detector detects error. End of Process



Fig. 11

